

ABSTRACT

L'AIR LIQUIDE, SOCIETE ANONYME A DIRECTOIRE ET CONSEIL
DE SURVEILLANCE POUR L'ETUDE ET L'EXPLOITATION

DES PROCEDES GEORGES CLAUDE

**Inventors: Christian Bonnet, Jean-Marie Fortain
and Marc Wagner**

Title:

Brazed copper heat exchangers and process for
manufacturing them by welding

The invention relates to a process for the arc welding of at least one metal workpiece (1) to a matrix (2) comprising at least one brazed zone (3), the braze of which contains copper and phosphorus, in which (a) at least one layer (5, 6, 7) of an alloy containing copper and more than 1% tin by weight is deposited on at least one part of the brazed zone (3) and (b) the metal workpiece (1) is welded to the said at least one layer (5, 6, 7) of copper/tin alloy deposited in step (a). Process for manufacturing a brazed copper heat exchanger, in which such a welding process is carried out. Exchangers thus obtained and their use in the cryogenic separation of gases, particularly air gases, in a cryogenic separation unit.

Figure 1

FIGURE FOR THE ABSRACT

